

Direct absorption of carbon dioxide CO₂ and methane CH₄ gases from the environment and their conversion into nano solution and nano solid matters and production of energy and oxygen by the use of nano compound at ambient temperature and pressure

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Abstract

In this paper, results of processes will be introduced for the absorption of carbon dioxide CO₂ and methane CH₄ gases direct from environment and their conversion into nano materials of the same suspended in solution or dried as powder. Where, concurrently within the processes of extraction of these gases in a simple reactor, we have managed to produce energy and oxygen.

Discussion

New methods for absorption of CO₂, CH₄, and others gases and further conversion and preservation of these elements in their nano solid state of matters at room temperature and pressure has been developed and achieved.

We have developed simple processes by which carbon dioxide CO₂ and methane CH₄ gases can be extracted from their environment where no additional heat or pressure to achieve this has been applied.

At the same time conditions can be created within these systems that CO₂ in conversion without going through any chemical process, can lead to creation of methyl, oxygen and methane gas and vice versa.

Where during these processes of CO₂ and methane gas extraction or conversion we

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have managed to produce usable energy and oxygen molecules in sustainable way.

Production and extraction of CO₂ by applying energy is a known technology in the present science, what is new with our technology is, that not only CO₂ is extracted in a simple system at room temperature and pressure, at the same time, energy released through absorption and conversion of the captured CO₂ to formic acid, we have developed simple techniques to capture the energy release from this transition process to produce useful power.

The novelty with this new technology is that in previous state of art technologies, engineers and scientists had to add energy to extract CO₂ the environment or to produce O₂, where through our technology, not only we generate useful energy while absorbing these gases from the environment, but also at the same time, the system can produce molecules of oxygen.

Thus, this simple system has the ability to replicate the processes as in a natural way as plants achieve in their conversion of CO₂ into oxygen.

With this technology, CO₂ and CH₄ gases are absorbed and attracted into and within the solution in their nano state, and then they are allowed to amalgamate to produce gel like residual solution and then form nano sediment.

Where, nano CO₂ can be extracted or removed from the solution as solid matter at room temperature.

The CO₂ stays in state of gel as nano materials in the solution due to their diamond crystals structure (sp³), or due to their crystal lattice structure, this creating a non-adhesion molecular bound like diamond crystal. Which this does not allow more than certain number of molecular structures to adhere to each other. Where, CO₂ nano matters once reaching a certain molecular gravitational level, as crystal, then they do not attach or cannot hold on to more than single or certain numbers of nano molecules of CO₂ and form independent or nano cell of matter. Thus, all clusters of CO₂ in solution have certain dimensions and that is why they stay like clouds or gel within the solution.

We have to explain that it is known tested fact to us that nano-coated materials and nano materials in sp²/sp³-state due to their characteristic of diamond crystal behaviour, they cannot be soldered to each other or soldered to another material. However, at the same time in a peculiar way the outer electron of these materials allows conductivity of matter. What this means, is that, even through they do not or cannot be attached to any other material from their outer structural boundaries, but in being connected with each, these materials allow flow of current and voltage through their outer boundary.

In a way, these behave like quartz materials, but at the same time after a number of layers, they do not or would have the gravitational pull or adhesion capability to allow more layers to be added to their layers.

Where, these layers along their grain and layer, they behave as a superconductor, but across layers in PN junction, depending on the position of PN cavity within the layers,

they become best resistors. Where, we have measured the resistance of these layers and this have been confirmed by other scientists whom have tested our material of sp²/sp³, that these materials have shown to have 20 M Ohms resistance threshold barrier. On the other hand, this material on the surface has as good as resistance capacity as air and diamond.

We have further managed to obtain solid matters of CO₂ from the system or dry the nano saturated nano CO₂ dilution into nano CO₂ powder. Thus for the first time in the world of science we have managed to generate at room temperature and pressure nano matters of CO₂ and methane through the same process.

To confirm that solutions obtained in our tests to contain CO₂ and CH₄ matters and these matters are in nano form, we had to under take laboratory tests of the solution with infrared spectroscopy and XRD respectively.

Further, as we know through our previous developments in nano technology, that nano materials are by principle sp²/sp³ in their character. Thus from results obtained from infrared spectroscopes and XRDs of matters during our process of absorption and nanolisation, we have concluded that the extracted CO₂ and CH₄ materials in solution and dry are both in nano state of matters of these gases.

At the same time parallel researches which we have found on the internet ³ since the publication of the first addition of this paper on the 23.12.2009 done by other scientists, Dr Omar M Yaghi of the university of California released on 7.12.2009, which extracts of this has published in article by The New York Times published ⁴ on the 8.12.2009, this article refers to “metal-organic frameworks (MOFs) material promise of carbon capture and release, and that these materials being crystalline sponge hybrid lattices of organic compound and metal atoms that has a huge internal area where gas molecules can be absorbed.”

Where we have reported this characteristics of metal-organic sponge effect and capture of CO₂ in 2006, and this has been confirmed by indecent testing by major nuclear testing centre in Europe in thier report in 2007.

Further, in the paper Dr Yaghi states, “MOF used in the study contained magnetism atoms”

Where in our previous disclosures and patents applied, we have declared that the absorption of these atom of CO₂ and CH₄ are Magravs (Magnetic gravitational fields) based. Which this independent scientific paper confirms our finding that CO₂ and CH₄ are gravitated to the water as nano molecules, and they do not have any interaction with the medium of the water, but the water is the container and tool or catalyst to keep these captured molecules in their singular or nano state and sp³ floating condition or as a solution.

In the same paper, Dr Yaghi refers to how material separated out CO₂, which allows methane to pass.

³ <http://macaulay.cuny.edu/eportfolios/ronald2009/2009/12/10/capturing-co2-from-ch4-with-mofs/>

Where our system not only captures the CO₂, but also at the same time it can capture CH₄ as we have reported before. That these captured carbon dioxide CO₂ and methane CH₄, produce diamond structure nano matters or crystals, with metallic behaviour like, which they have a superconductor characteristics and behave like conductors.

Thus, our findings are inline with other scientists and their scientific research works which have been reported. Where now we can clearly state these captured gases can be converted to solid nano materials, which behave like metals, and are superconductors, but in reality, their superconductivity of the matter is due to their sp³ nano characteristics and not their metallic condition.

Further Dr Yaghi states that 87 percent of the CO₂ captured, at 13-degree temperature are released back by the MOF matter to the environment.

Where this is inline with our reported behaviour, that as the CO₂ are extracted by these materials we have developed, which our capturing materials are metallic and organic in their real structures, these materials then release their captured CO₂ in the water at room temperature in Gans (Gas-Nano-Solid) state.

Further, he states that to release the balance 13 percent of the captured gas, one-need temperatures of 175 Fahrenheit.

Where, we release all captured CO₂ as nano-material into the basic solution of the system, this all at room temperatures without any heat being applied.

Further more, the Canadian company Mantra-Venture-Group ⁴ has announced on Business News Network that in conjunction with 3M using electroreduction of carbon dioxide, they confirm that they need 6Mw of energy to extract one tonne of CO₂, which this is considered to be at the edge of technology of CO₂ extraction.

Where, with our new technology we produce energy rather than consuming energy.

Where further MantraEnergy in conjunction with use of the CO₂ they capture, they can produce formic acid, using the technique developed by Dr Gabor Laurenczy ⁵. Where he has confirmed that he can generate hydrogen from formic acid. (Video-interview: <http://www.mantraenergy.com/mantra-in-the-news/squeezeplay-zapping-carbon.html>).

We clearly have shown and absorbed CH₄ not only from the environment, as similarly we have reported the production of formic acid through the natural gravitational forces of our system as has been shown by libratory tests results which are discussed below.

We have reported the production of CH₃ in our system late last year as we managed to separate the CH₃ and its capture in nano state of matter in our system. The production of radical CH₃ from the H₂O molecule of the water as the magnetic and gravitational catalyst of the system, subsequently this leading to existence of two radicals in the

⁴ www.mantraenergy.com

⁵ <http://www.epfl.ch/index.en.html>

systems at the same time, one of the CH_3 and one of an atom of Hydrogen leading to release of molecules of oxygen.

Scientists at a nuclear centre have confirmed the production of hydrogen radical through our technology in 2007 in their independent (not yet published) report.

Therefore, it has become a simpler method through our development to extract CO_2 and CH_4 and released it in nano solid matter in water, and at the same time have the ability to produce energy and oxygen as we have demonstrate it to independent engineers in December 2009.

Further on in this paper we show and present pictures of both matters of CO_2 and CH_4 in solution and solid state for the first time (Fig: 9 for solution and Fig: 10 for powder of CO_2 , and Fig: 11 for solution and Fig: 12 for powder of the CH_4). The CO_2 in solution and dry state has a white milky appearance and methane CH_4 has a blue greenish colour.

We have mentioned Dr Yaghis' paper in this section as the findings in his paper is near to our finding and is one of the latest in this field.

The CO_2 capture is well documented subject on internet and we are not here to list them to support our claim, one can refer to these on the internet to find that our claims are inline with main stream physics community, with the difference that we reported the capture of CO_2 in early 2005 in nano materials on our web site and now we are reporting the first solid nano material of the gas as in Gans-state. We call a Gas-Nano-Solid state the GANS-state, which is a state or phase of transition of matters, which has been unknown in actual science up to the release of this paper.

Meanwhile in light of our latest discovery and disclosure of the capture of CO_2 as solid or in solution, our foundation will ask the nuclear centre which has done the independent test for our system in 2006-2007, that if we can release part of this report confirming the CO_2 capability capture of our materials.

The CO₂ absorption

In our testes and development phase, we have managed to produced a special material for the production of a new and a simple system for absorption of CO₂ through the principle of Magravs field forces, rather than the chemical method of absorption of these gases. Where The absorption principles through gravitational systems has been disclosed in full in the book, which we have published in July 2009 (titled: The universal order of the creation of Matter; ISBN 978-94-6087-001-9). In this book, I have, explained in detail, the principle of gravitational and Magnetic field positioning and attraction and repulsion of matters from these systems respectively.

Through the development of these new composite materials of organic and metallic nano layers, we have managed to create specific static gravitational field forces which can be in the magnetic wave length of the CO₂ molecules, or we have developed condition(s) that as the gravitational field attracted the CO₂ to the material, the Magnetic field(s) within these layers cause the repulsion or the release of the captured molecules of the CO₂ from the layers. Thus causing the creation of nano molecules of CO₂ in the water, and as we use the magnetic fields of the water for stability and as a magnetic catalyst, they come to allow the formation of clusters of Gans of CO₂ and create a solution of these nano matters, which these latter manifest themselves as a sediment in the liquid of the system at the bottom of the holding container (Fig 20).

The solution of nano carbon dioxide CO₂ and has been subjected to infrared spectroscopy by independent laboratory confirming the production of the first nano CO₂ in a solution or as gel at 2630 cm⁻¹ wavelength of the spectrum (Fig: 1).

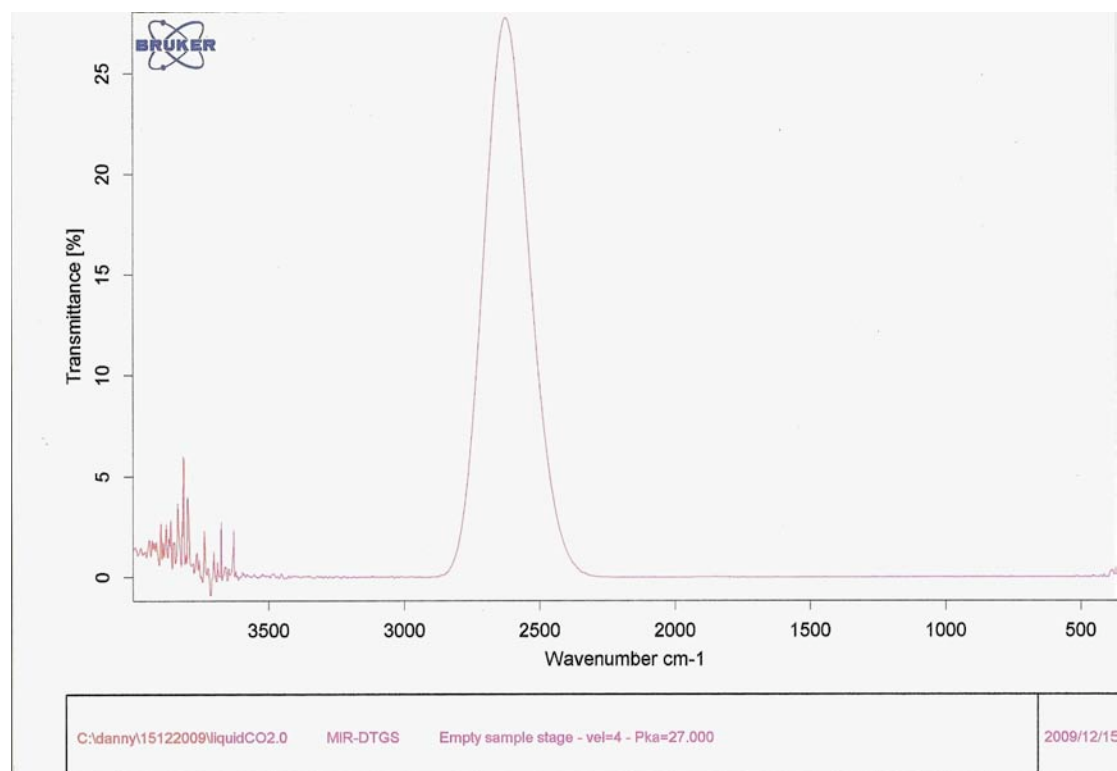


Fig: 1 Infrared spectroscopy of the CO₂ solution.

This is actually the best observe data as calculated and predicted figure is said to be at 2640 cm⁻¹ (Fig: 2). (Source: <http://science.widener.edu>)

The closeness of the figure of 2630 showing the purity of the CO₂ solid matters within the solution obtained during our test.

Where even the predicted matter has a multiple peaks, where these captured matters due to their singularity in the measured sample has a sharp and clear single peak as has been shown in Fig: 1.

This sharp peak can confirm the possible nano sp³ structure of the suspended capture matters of CO₂ in this solution, once XRD test was carried out for the same sample.

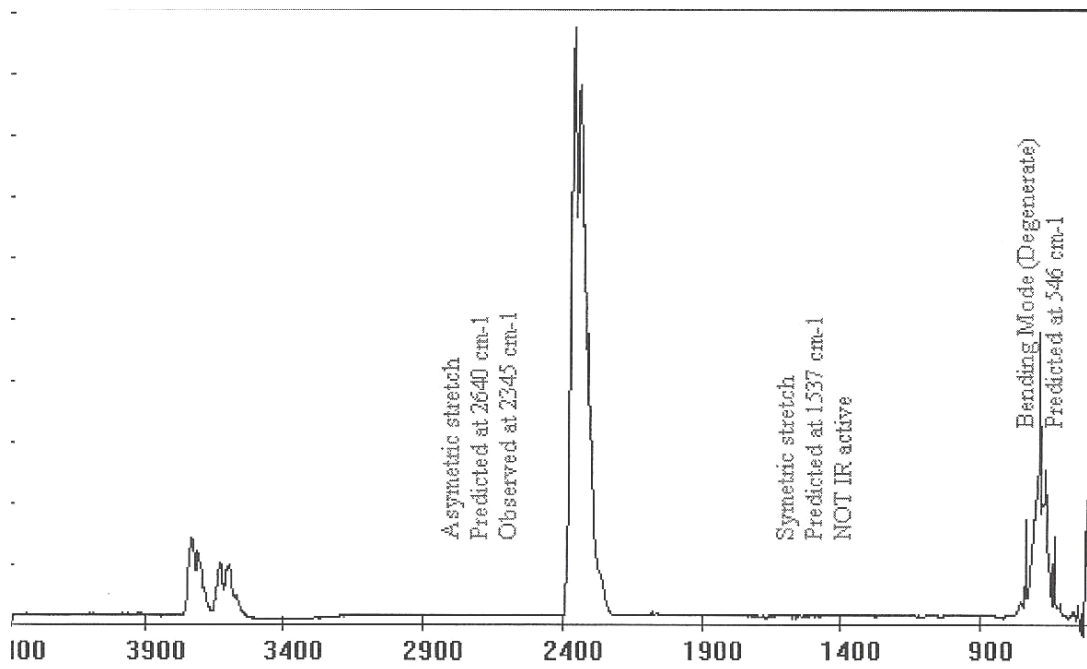


Fig: 2 Standard CO₂ infrared spectroscopy graph.

For further confirmation of nano structure of the matters captured within the solution the solution was allowed to dry and then as a film was subjected to XRD testing.

The results of this test showed a clear match only as a superconductor characteristics for this material. Further analysis with the data from XRD, a superconductor material characteristics perfect match was not found for this matter.

With this test, and from our pervious developments and testing, clearly it is shown that the matter within the solution has superconductivity property (Fig: 3), which has new non matching data in the present collected reference data, and this is the characteristics of nano materials in sp³ state of matter.

This matter as superconductors known or ever been recorded for observation.

Thus the XRD of the CO₂ data as solid and its graphs have become the new base knowledge and fundamental basic data for any future capture of these gases, once they are absorbed as a nano material in solid state.

From our previous developments and tests, we know that all nano materials show and have superconductivities characterises. Now with this test, now we have further proof that the captured CO₂ in the solution is in nano state of matter.

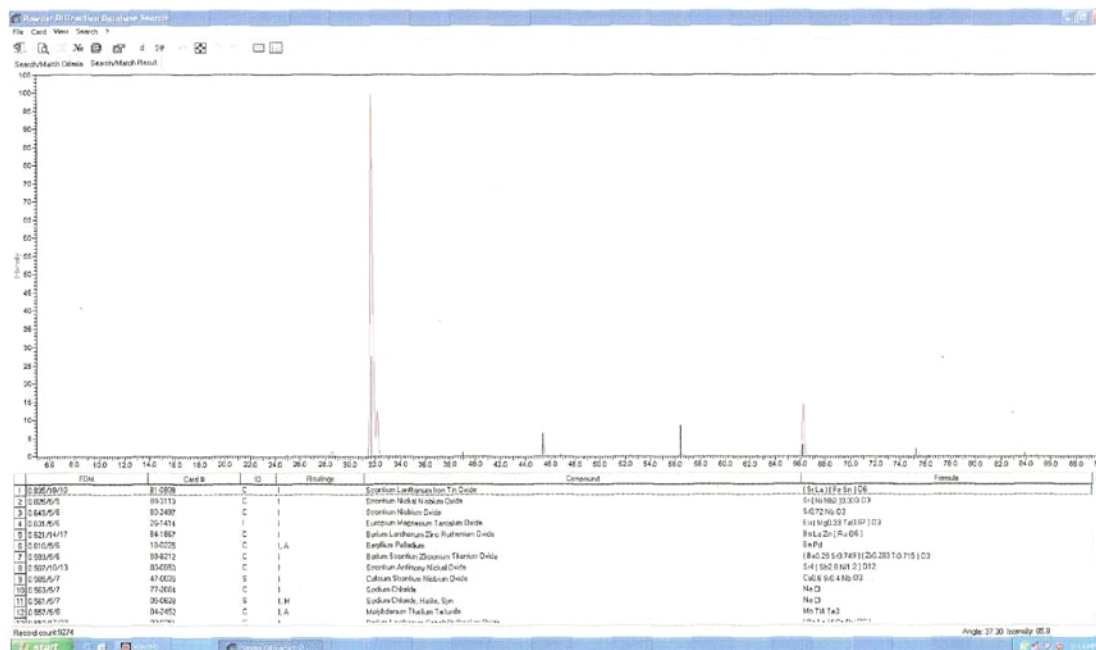


Fig: 3 XRD of the CO₂ nano material

The closest match as superconductor characteristics to CO₂ in the solution or in dry state of matter, this was found to be an exotic mixture of five different materials, as can be seen in the table at the bottom of the graph, with the best match reference data figures to be about 80%-90% superconductivity properties of this matter.

We the discovery of this new state of matters and their simplicity of their production and their high superconductivity properties, we predict that gans (GAs Nano Solid) of gases are going to be the next best purest superconductors and resistors materials of the future.

Further more: in confirming the matter of solution being carbon dioxide and at the same time confirming that this matter within the structure of the solution and the system set-up has the capability of conversion to formic acid in presence of CO₂ captured in the solution of water, a further test was carried out with infrared spectroscopy to confirm this conversion principle of the confirmed nano CO₂ capture to formic acid within the solution.

For confirmation of absorption capability of nano CO₂ by the solution and its

conversion into formic acid, the chamber of the infrared spectrometer system was filled with pure CO₂ and measurements were taken. This measurement is shown as line A on graph Fig: 4.

Then the solution of nano CO₂ from our test was then injected into the chamber, and the graph line B in Fig: 4 was obtained.

The peak region NC in the fig 4 shows an increase in carbon dioxide in the solution was once it was introduced into the chamber.

This showing that the CO₂ solution is extracting carbon from the chamber or causes reduction in carbon content of the chamber.

This in away showing the absorption capability of the solution of nano CO₂ of more CO₂ on its own independently, and confirming further from previous results that nano materials are CO₂ absorber by their nature of construction , even though these matters are themselves part of the original solution.

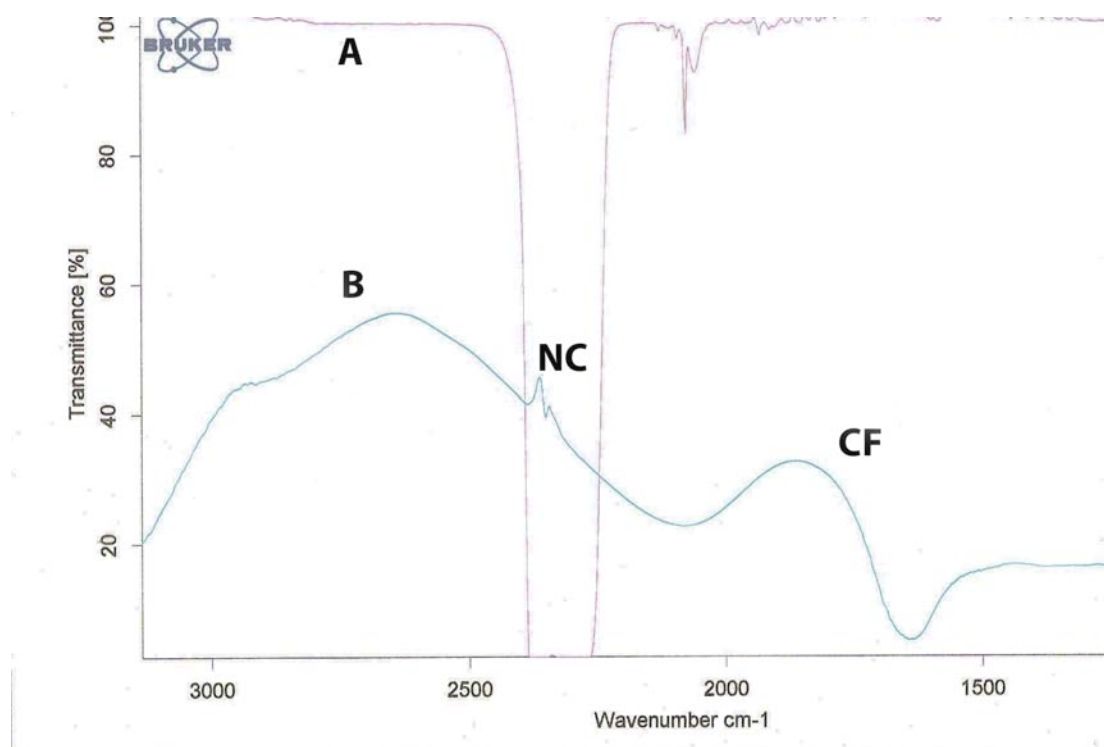


Fig: 4 The comparison graph of injection of the solution of CO₂ into CO₂ gas environment.

In this graph the peak NC showing absorption of CO₂ from the chamber and this followed by formation of formic acid as shown in the CF region of this graph through infrared spectroscopy test Fig: 4.

The graph of the CO₂ from the solution and its conversion is independently shown in Fig: 6.

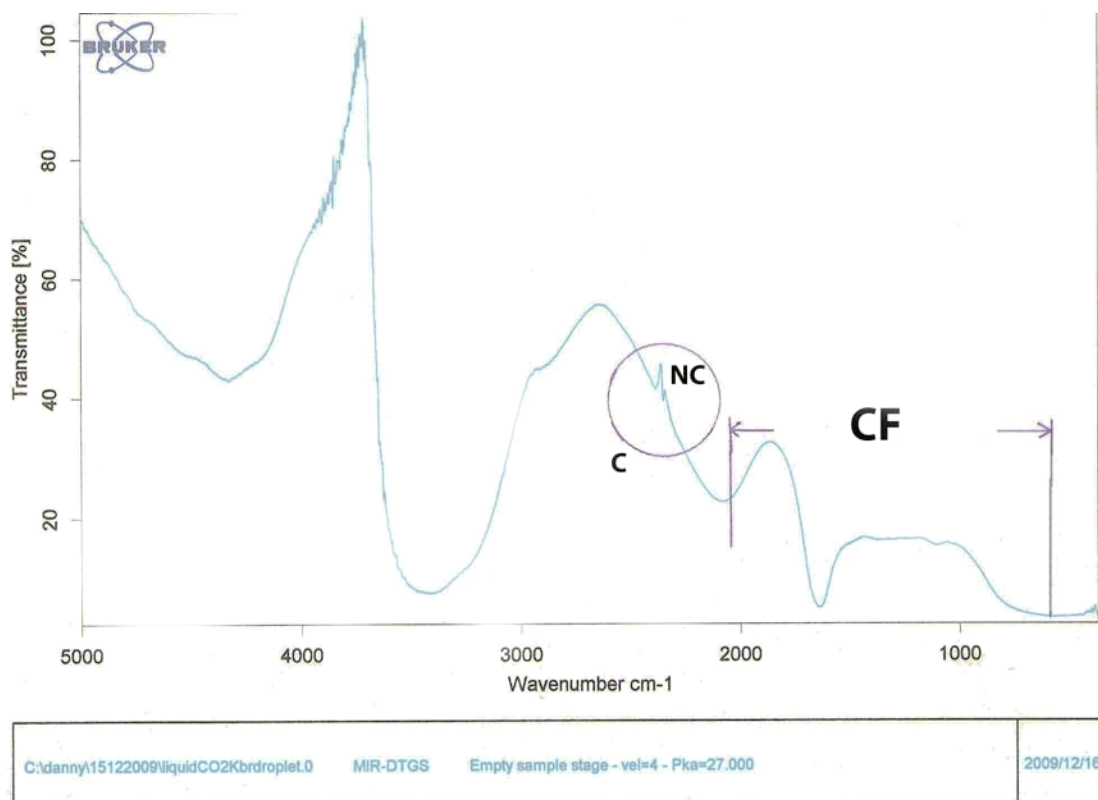


Fig: 5 The graph of the conversion of the CO₂ into the formic acid within the chamber.

It is at this point of gravitation attraction and subsequent Magnetic field repulsion that the magnetic fields strength equal to the strength of the Magravs of the proton and the electron are made available to the system, which these fields are absorbed by the electrodes within the system and then these are past to cooper wire atoms', which are the constituent matters of electrodes and cause the vibration of electrons within the copper wire leading to creation of current in them.

In the actual physics they call these released packages of magnetic fields or energies as photons as they are released which are then these are absorbed by electrodes placed within the system and used for example to light diodes.

Through development of this technology, production of power without burning fuel and at levels which can meet the demand of a household or a car, is achievable.

Where, for separation of CO₂ from environment, in present state of art technologies, energy is used to be able to first separate the CO₂ and then cause the formation of formic acid reaction chain, this leading to production CH₄ or hydrogen.

Where through our simple technology, in opposite to the norm, we generate energy while extracting CO₂ from the environment. The method we use is the principle of gravitational positioning and is exactly the way by which matters are extracted and separated in the universe as has been explained in the book.

Our approach is totally different than the present state of art technology, where they use and follow the fundamentals of chemistry, hence the need for their system for

energy input to achieve the separation or extraction and we follow the universal method of extraction and holding where magnetic fields as energies are made available through the process .

The example of energy production during the process of CO₂ extraction is shown by lighting the diodes as can be seen in Fig: 6.

Where this set of three LED lights being powered by CO₂ capture process. These lights have being on contentiously from 7 pm Saturday 11.12.2009 until this report is release 05.01.2010. Further we expect that these lights will be on for months to come, if we allow the set-up to be running as it is. The intensity of the lights from these LEDs have not diminished and in fact, sometimes they are brighter.

Through development of this technology, production of power without burning fuel and at levels, which can meet the demand of a household or a car, is comfortable achievable.

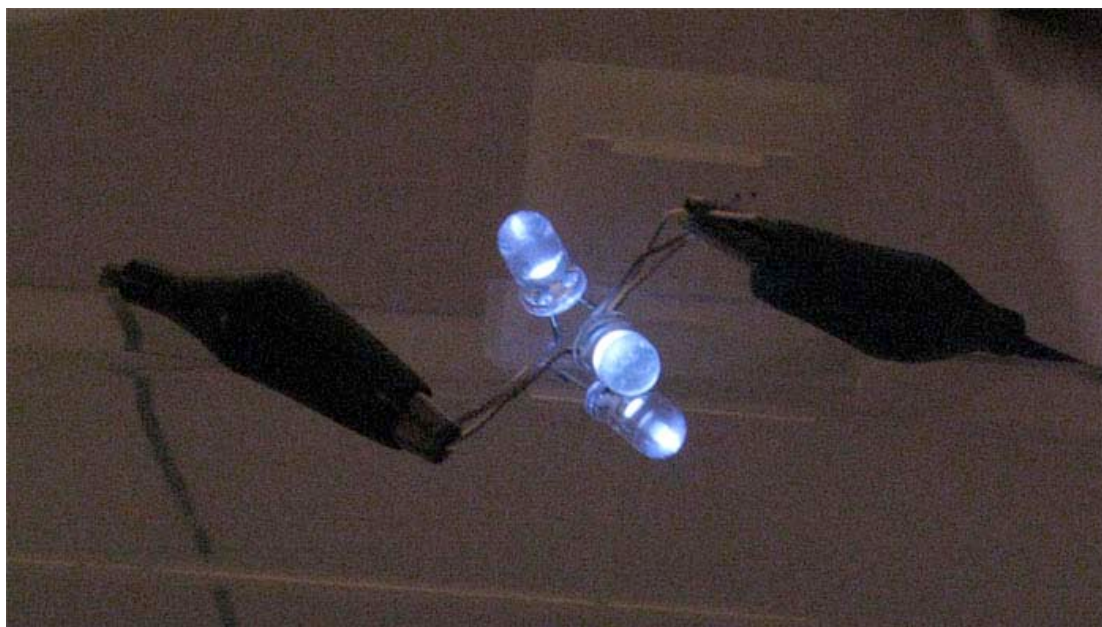


Fig: 6: Group LED's light

For further investigation into confirmation of CO₂ capture and its conversion in their interaction with water to form formic acid, the standard reference infrared spectroscopy graph and data of formic acid was obtained as shown in Fig 7.

To confirm further the conversion of the CO₂ into formic acid from the CO₂ nano solution from our test, the following procedures were carried out.

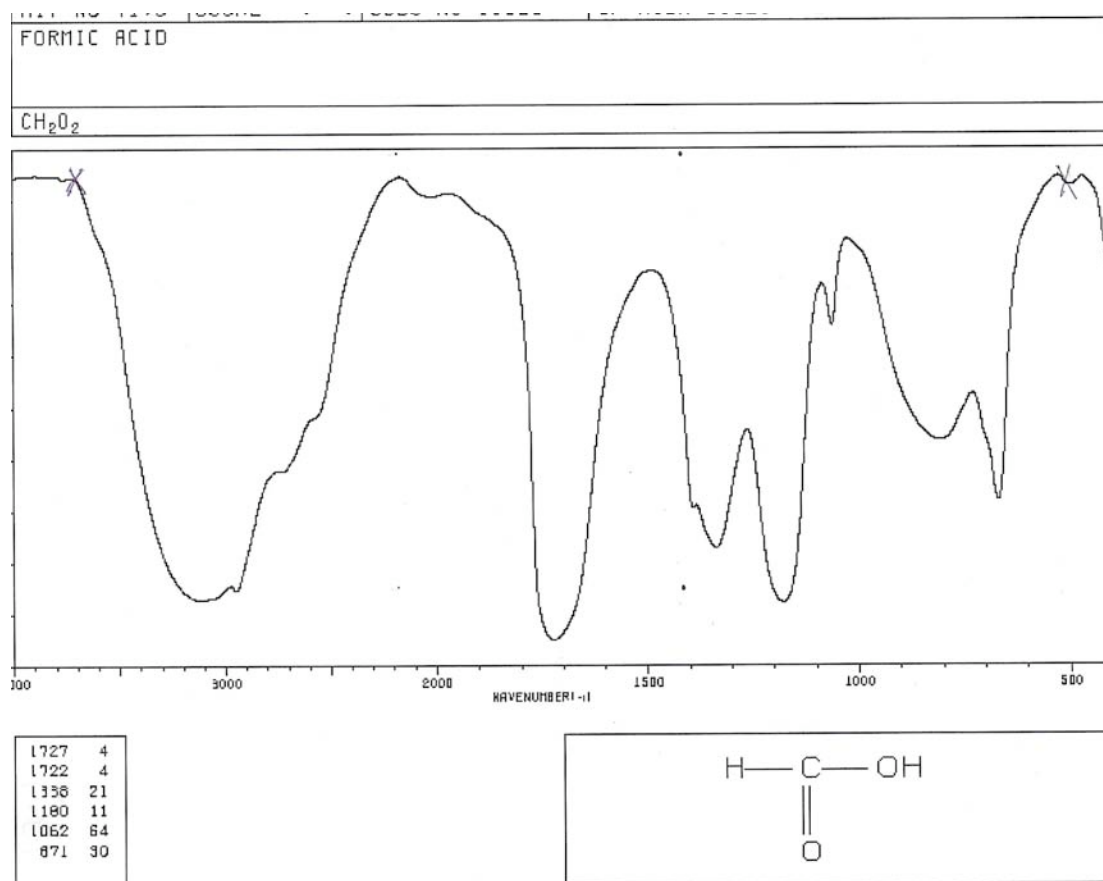


Fig: 7 The standard reference of IR spectroscopy of the formic acid.

To begin with, formic acid liquid with 95% purity was introduced as film on the sample disc of infrared spectroscopy system and the graph FA in Fig: 8 was obtained.

Then a drop of solution of nano CO₂ was place on the film the formic acid and the graph CO₂+FA in Fig: 8 was obtained.

When the three graphs are superimposed, that is the original infrared graph of the nano solution of CO₂, on the graph of the formic acid and then the graph of the mixture of formic acid with CO₂ solution, these clearly showing the absorption of CO₂ in the zone 1 in Fig: 8, and then presence and formation of formic acid as shown in the zone 2 of the Fig: 8.

This showing the same pattern of presence of Formic acid in the solution of nano CO₂, hence not only confirmation of existence of CO₂ in the nano CO₂ solution, but at the same time the absorption capacity of nano CO₂ solution of CO₂ from the environment and conversion of these additional CO₂ in conjunction with water into formic acid.

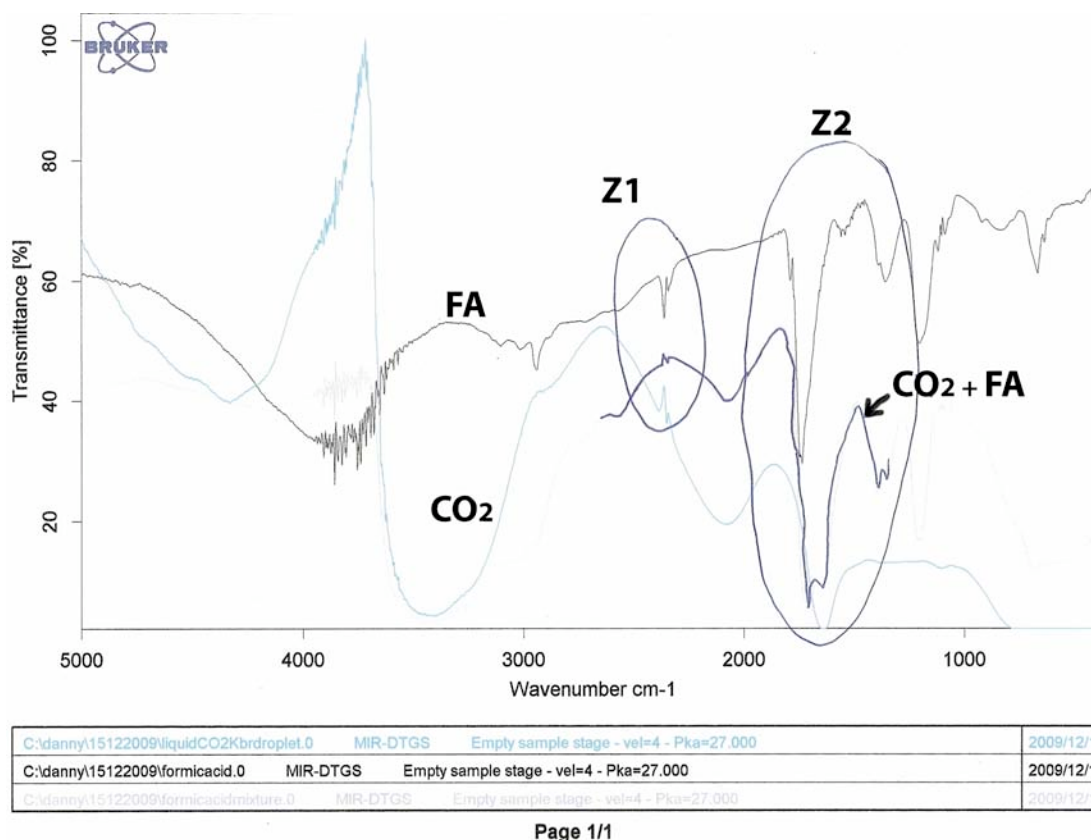


Fig: 8 The superimposed graph of CO₂ and conversion of Formic acid and formic acid and mixture of formic acid and solution of nano CO₂.

Having established the characteristic of the matter within the solution from tests and results shown in Figures 1, 3, 4, 5 and 8, without the shadow of a doubt, the white material is CO₂ in nano state, and from Fig: 3, we have the confirmation that this matter is a nano structure in sp³ and behaves as a superconductor.

Further, as the process of the energy production from the system has been extended to days and weeks, the following characteristics and materials have been detected and collected from the system.

In the process of the running the system, the area around the electrodes which have been specially treated, start gathering a white cloud around them after subjecting the electrodes to certain conditions. From this point on the environment around the electrodes start creating a mist of white material around them, and then gradually the whole containment becomes like milky colour liquid, and then white sediment is established in the container.

Through the infrared spectroscopy shown in Fig: 1, we can confirm that the material in the solution is carbon dioxide and the nano state of this material is very much confirmed by the second test of XRD, as the only match for the dried solid residual of this milky substance shows' superconductivity behaviour of this material. This confirming the nano characteristic of the CO₂ as white powder or in solid state of matter too.

This is for the first time in the world of science that CO₂ as gas not only can be captured without use of any pressure, temperature, or energy, but this matter can be extracted and held as a solid at room temperature.

The picture of concentrated nano carbon in solution used for infrared spectroscopy leading to graph in Fig: 1 is shown in Fig 9.

To our knowledge, this is the first picture of nano CO₂ solution produced and maintained at room temperature and pressure ever been recorded.

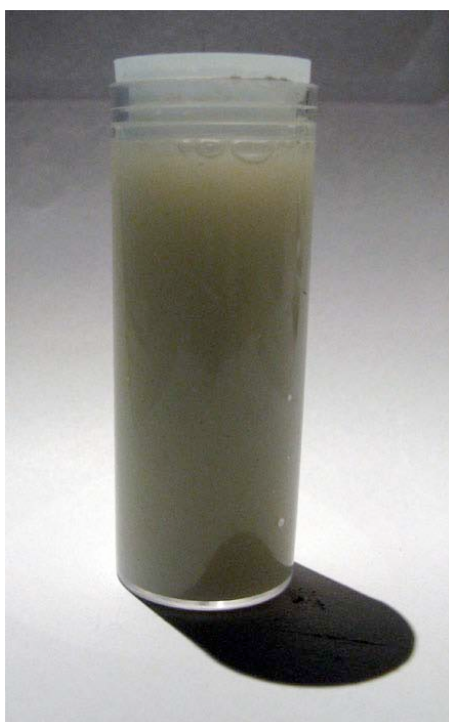


Fig: 9 Solution of nano-CO₂

Photographs of dried powder of nano CO₂ are shown in Figures 10 A, B, C, D. These are the first pictures taken of nano CO₂ in solid state in atmospheric condition.

This is important as nano CO₂ or CO₂ has never been observed in solid state at room temperature and the only solid state of this gas known has been in frozen state of this matter as like of ice blocks (Dry ice).

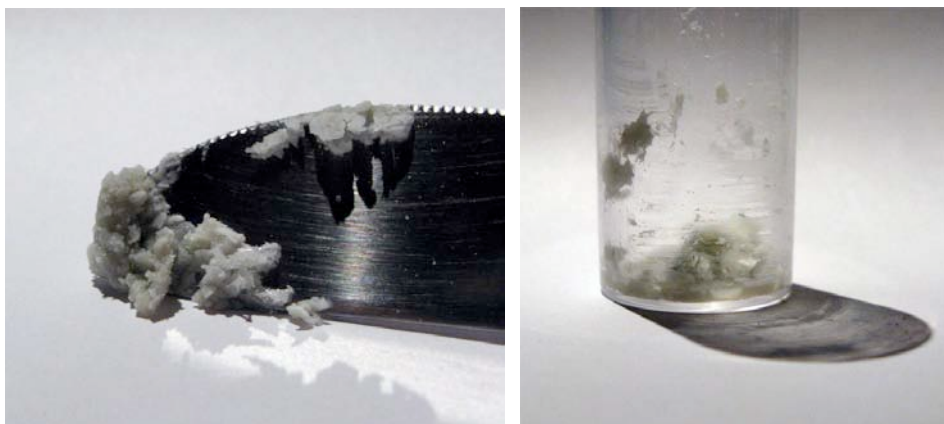


Fig: 10 A, B: Solid nano-CO₂ in tube and on a knife

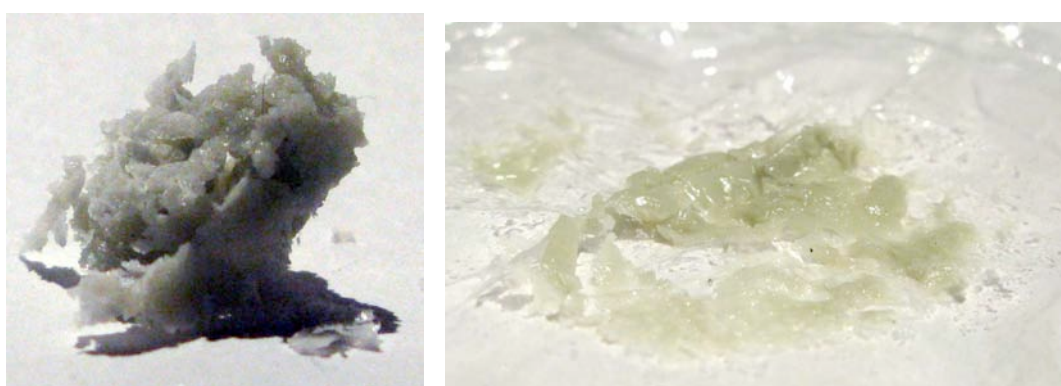


Fig: 10 C: Solid and gel nano-CO₂



Fig: 10 D: The Solid CO₂ material in the Gans-state being held in hand at room temperature.
The solid CO₂ is not a 'dry ice', but a mastic-like matter.

The important point to note is that, there is no content ratio between the CO₂ absorbed in the liquid and the water, as is the usual procedure to state in most tests like these content ratio between sediments or gel and the water of the solution.

With this method of CO₂ absorption technology, as long as one can extract nano CO₂ from the environment or surrounding environment of water, the CO₂ absorbed can be removed without ever a need for the change of the water.

In practice, we have a number of times collected Gans of CO₂ from the same water within the container. The only reduction in the water is due to vaporisation or when it is part of the get.

This is very important and crucial point, and this is where this technology departs from present science of chemistry, and stands on its own merit as a nuclear gravitational system.

That is where if the system was a chemically based system, the CO₂ content of the water would have been fixed and hence there would have been a ratio balance and final content for CO₂ in the water and this value would have been fixed.

Due to the new understanding of the gravitational systems, as has been explained in the book (The universal order of creation of Matters), these specifically designed systems, with specifically placed and produced electrodes, these systems can create a strong but invisible gravitational and Magnetic fields within the layers zone of the electrodes, that these electrodes, as gravitational positioning elements, can create the gravitational pull that can absorb CO₂ molecules from the water and beyond the boundaries of the water, without the CO₂ as a nano molecule ever chemically interacting with the water molecules content of the system and going through the normal chemical processes.

Thus; if this was not so, how could electrodes deep submerged in liquid would have been able to extract CO₂ from the air above the liquid and bring them into the material of the electrode for them to be separated as individual CO₂ molecules on a continues bases, as we have been collecting these materials from the same container over period of weeks.

Where in this processes, as the materials like CO₂ become in nano structure of their own state, then they are sealed like the diamond and hence they achieve a self sustained gravitational system, like a planet, that does not interact gravitational or magnetically with any other matter and attain the state of singularity or nano state.

This solution of CO₂ material feels like mercury as gel, and to touch it feels cold, but does not stick to its container that much.

After extracting the water from the CO₂ gans solution, the matter takes the form of gel and is cream whitish in colour.

Thus, this is a static nuclear gravitational and magnetic field extraction process, which has never been recorded or known up to this point.

With this method of CO₂ extraction, there are no ratios between the matters collected as nano matters and the water content of the system, as the residual of gans of the gases can continuously be extracted from the environment of the system, without change in the volume of the water of the system.

The point to note is that, the volume of the water content of the system stays the same. Where, the system caries on gravitating CO₂ and other gases from its environment indefinitely. But the total mass and the volume of the system increases as gases are absorbed into the system by the gravitational principle.

In fact, the system gains weight, mass, and volume as it absorbs more gases. This phenomenon was observed after the test was completed in Holland in the lab, and the increase in volume of the content of the system was noted at the end of that meeting, that we have more liquid in the bottle than when we started the test after about four hours of testing and running the system for energy production trail.

This is normal phenomenon, as extra gases from the environment of the system have been absorbed in the system and converted to gans, which settled at the bottom of the bottle of liquid.

The snap shot from video of the matters content of gans of CO₂ as misty residual matter collected after the test in master bottle is shown in Fig: 10E.

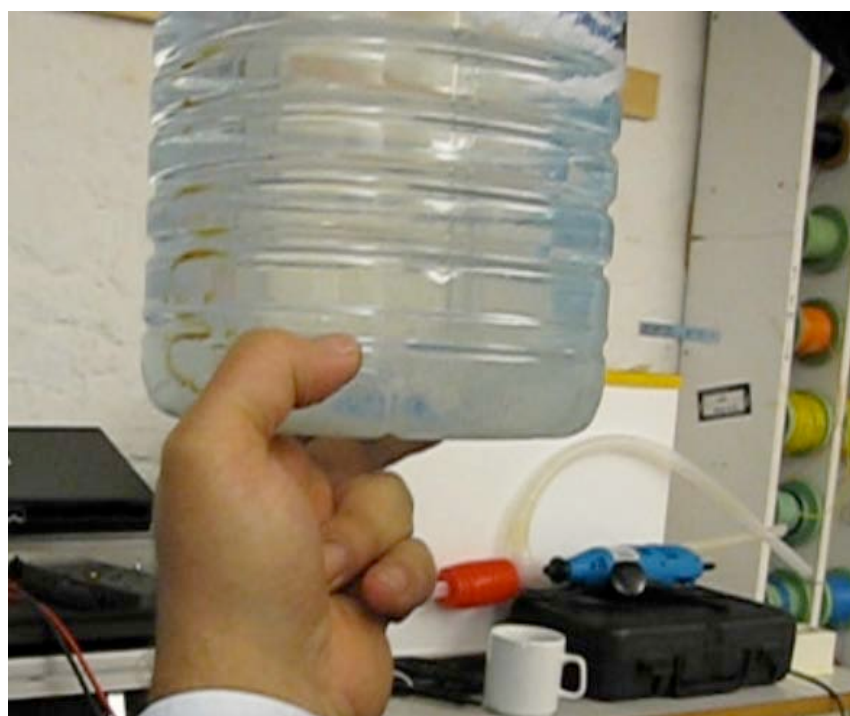


Fig: 10E A misty residue at the bottom of the bottle.

The principle and the technology used for the extraction of CO₂ and its containment as a nano matter can be used for making and allowing the production and development of vacuum systems or singular atomic weight extraction systems, which can attain high purity vacuum condition needed for space technologies of the future or in room laboratories for extracting certain molecules or germs.

This vacuuming technique can be achieved without use of any suction system or high-vacuumed pressure pumps as is the norm in today's technologies for production of interstellar space level conditions which are hard to achieve. These systems do not even need to be adjacent to the system or near the space where the extraction is needed to take place.

In the universe, this singular Magravs strength principle is the exact method used by certain planets or stars and solar systems in managing to extract only certain materials from their solar or galaxy environment respectively. An example of mainly mono Magravs system is few elements material content, being the like Saturn with mainly helium content matter.

In fact in this system we have shown, a micro universal selective gravitational , which in this scale we only absorb CO₂ gases from the environment. Where the operation of these systems can be changed and modified to extract any material from any environment without the use of suction or chemical process and so on.

The methane CH₄ absorption

During the process of running the system for extraction of CO₂ and production of useful current, due to specific configuration setting of the system, specific section of system starts the absorption of methane gas from the environment.

At this point, the water content of these sections of the power system starts to become blue greenish or violet blue in colour, similar to reported colours of the methane in solid state.

Further to confirm the nature of this new material, the same tests as for the CO₂ gas extraction was undertaken and results obtained were as follows.

Through infrared spectroscopy test, it has become clear that this solution has the ability to facilitate the CH₄ capture and the release of the residuals of CH₄ as solid in the dilution of the liquid through the same principles as described above for CO₂ gas.

This effect of separation of CH₄ as solution shown in Fig: 11 A and B as blue-greenish water and the same colour sediments in the tube.



Fig: 11A. Solution of nano Methane (from two different angles)



Fig: 11B. Solution of nano Methane (from two different angles)

The solid dry residual nano CH_4 powder is shown in Fig: 12.



Fig.: 12. Solid nano CH_4

The process of creation of current and the observation of appearance of residual of solid matter indicates two clear processes:

Firstly, the system starts to absorb methane gas from the environment through the same principle as described through mainly Magravs process as for gas of carbon dioxide CO_2 .

With the difference that in this case different and specific conditions Magravs strength level by the layers of matters' of electrodes are generated, that this new Magravs strength level facilitates the extraction or absorption of the new material by the system and within and through the system.

As the gravitational and Magnetic fields needed for extraction of the CH_4 Magravs are slightly different than the Magravs fields for CO_2 , hence different combination of Magravs is needed to extract the CH_4 from the environment.

Hence, in being able to collect and further test the new material from the solution to confirm the extraction of CH_4 from its environment, this proves that, the system has the ability according to its pre-set conditions, to create different Magravs strength within the layers of the electrodes, that can absorb or gravitated different materials to the system such as CO_2 or CH_4 , through operation of the same system concurrently.

Secondly, another processes can take place within the system, where the CO_2 absorbed in the system goes through process of interaction with water and initiates the production of CH_4 and release of molecules of oxygen.

To achieve the production of methane gas through this process, one molecule of CO_2 and two molecules of water H_2O are required, that by using the energy absorbed by the material within the system leads to production of CH_3 radical and then CH_4 as molecule.

Where, this process is not a chemically binding rather is Hydrogen plasma gravitated and it is sustained through magnetic field strength within the layers of coating or matters and energies within the system facilitates such a process.

In conventional chemistry, it is assumed at least energies equivalent to eight photons are needed to achieve such a conversion from CO_2 to CH_4 .

Through this method of using our new system, the material of the systems acts as catalyst and magnetic field provider, that such energy (eight photons) are not required, but in fact gravitational and magnetic fields of the plasma of the oxygen and hydrogen of the water become the magnetic field binder for this chain of events.

This being the reason why in similar cases and in theoretical chemistry one needs energy to trigger such conversion, where as through our system the hydrogen and it sister radicals in presence of the free magnetic oxygen, the solution becomes the magnetic bridge, allowing the system to release energy in larger quantities than eight photons, rather than in prallel chemical process in needing energy for the same process to take place in these systems.

In this second path of production of CH_4 , one needs catalytic effect of the material used in the set-up of the system. In the nature, this catalytic effect needs eight photons of energy for it to take place, which this is usually provided through sunrays.

In the case of our system the conversion of CO_2 to production of CH_4 and O_2 takes place through the layers structural materials and the localised gravitational fields which they generate. As these materials have the ability to absorb infrareds rays too as well as sunrays in the environment and hence these new materials can facilitate the production of the methane and oxygen gases and release of energy twenty four hours a day.

Thus in fact with the development of this new system, we have clearly shown that for process of photosynthesis, one needs the Magravs strength in the infrared spectrum. Through this process we have clearly shown why plant do their CO_2 to CH_4 and O_2 conversation mainly during the night time, where the infrared radiation from the planet is high, as the sun magnetic field can not suppress their emission upwards from the earth surface. Where it is known fact that the earth is the best supplier of infrared rays.

Further on, to show the correctness of our technology and that we do not require energy to extract CH_4 , where in fact we produce energy as power supplier through our technology, the engineers at the lab proposed to connected our system to an electric fan, to see if the poser produce can run mechanical devices like this on a long term. as can be see in Fig: 13. Where we ran the fan for over an hour.

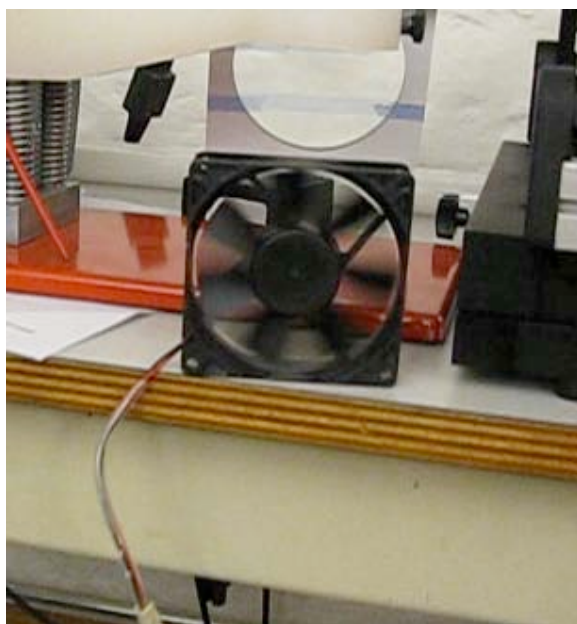


Fig: 13: Turning fan powered by CH_4 extraction system.

This test was done in presence of journalist and engineers from the magazine that we cooperate with and all has been videoed. The test happened in the basement of their premises, in the absence of any sunlight.

Energy release by the process of gravitation and extraction of CH_4 creates more energy and stronger current than the same process of absorbing CO_2 from the environment. Where this process leads to creation of strong current rather than stronger voltage output from the system.

The absorption of CO_2 from the environment and conversion of it into formic acid and release of energy needed for the photosynthesis and where at the same time the CH_3 stage of methane gas as methyl becomes first stage for the production of sugar bases in organic materials has been observed and videoed with operation of one of systems.

Thus for the first time the process of photosynthesis can be shown to take place exactly as happens in a nature like in a tree through these systems can be demonstrated.

These systems not only absorb CO_2 from environment, but through their process of conversion, they can lead to production and released of oxygen as molecular structure.

To confirm and be able to show such a process takes place within the process of the production of methane and oxygen and hydrogen from our system ,it is essential to show that methane in nano state of matter as we have collected in our system is or has a superconductivity behaviour, as was shown for CO_2 nano material.

For the confirmation that the captured CH_4 solid material is or has a super-conductive behaviour, we subjected the solid residual of the blue-greenish matter to XRD testing in the laboratory.

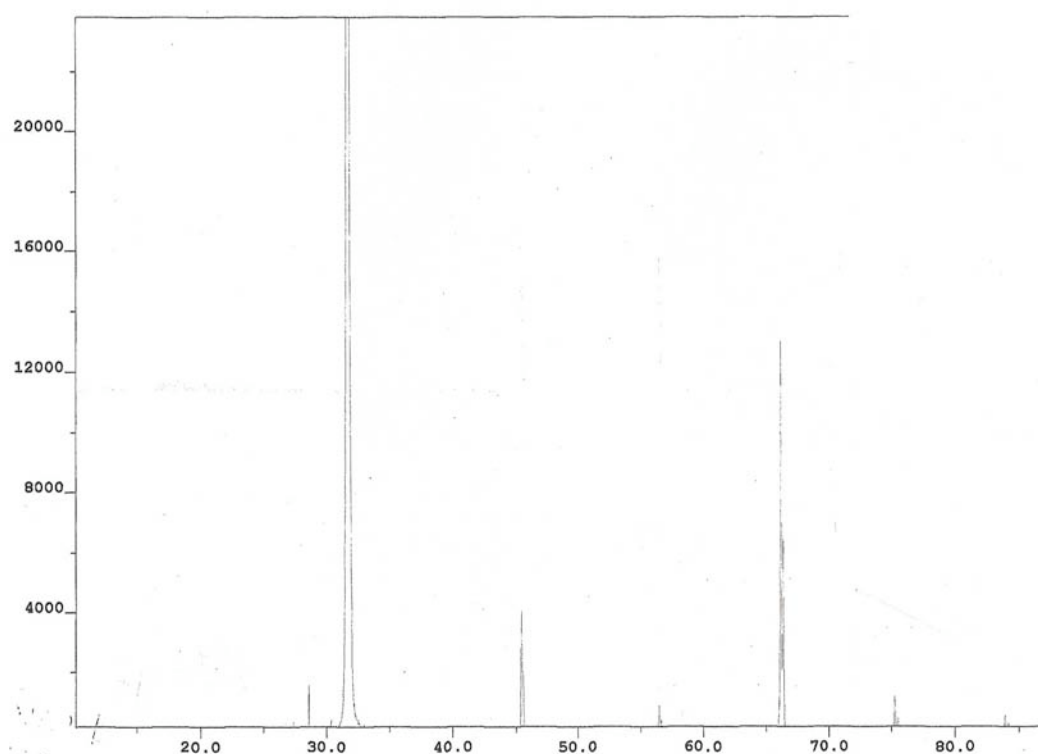


Fig: 14 The XRD of the superconductor characteristic of nano Methane solid

The result of this test has to be noted that CH₄ as CO₂ in nano state has a superconductivity behaviour detected seen in XRD is shown graph of Fig: 14.

The nearest material composite match to this material characteristic of our solid matter is beryllium palladium which matches by 95% as a superconductor behaviour only. The list of near enough matches as superconductor to CH₄ in nano state can be seen in table shown in Fig: 15.

Comment:			
Scan Type: 2Theta Scan			
Start Angle: 5 deg.			
Stop Angle: 90 deg.			
Num Points: 4251			
Step Size: 0.02 deg.			
Name=Beryllium Palladium / Be Pd			
FOM: 0.950	Total Matches: 6	Total Lines: 6(11)	Card: 65-3196
Name=Beryllium Palladium / Be Pd			
FOM: 0.946	Total Matches: 6	Total Lines: 6(11)	Card: 18-0225
Name=Sodium Silver Chloride / Na.903 Ag.097 Cl			
FOM: 0.942	Total Matches: 6	Total Lines: 6(9)	Card: 77-2065
Name=Sodium Chloride; Halite / Na Cl			
FOM: 0.936	Total Matches: 7	Total Lines: 7(9)	Card: 75-0306
Name=Sodium Chloride; Halite, Syn / Na Cl			
FOM: 0.905	Total Matches: 7	Total Lines: 7(17)	Card: 05-0628
Name=Sodium Chloride / Na Cl			
FOM: 0.866	Total Matches: 7	Total Lines: 7(9)	Card: 77-2064
Name=Strontium Nickel Niobium Oxide / Sr (Ni Nb2)0.333 O3			
FOM: 0.860	Total Matches: 5	Total Lines: 5(12)	Card: 89-3113
Name=Manganese Tellurium Selenide / Mn Se0.8 Te0.2			
FOM: 0.837	Total Matches: 7	Total Lines: 7(9)	Card: 89-4969
Name=Strontium Niobium Oxide / Sr0.72 Nb O3			
FOM: 0.827	Total Matches: 5	Total Lines: 6(12)	Card: 80-2497
Name=Barium Strontium Zirconium Titanium Oxide / (Ba0.25 Sr0.749) (Zr0.283 Ti0.715) O3			
FOM: 0.785	Total Matches: 5	Total Lines: 6(12)	Card: 89-8212

Fig: 15 The nearest data of matching materials available that match the green blue powder superconductivity characteristic to the extracted nano methane solid from the solution.

The comparison of superconductivity characteristics of the CO₂ and of the CH₄ nano materials obtained by XRD and matching and similarity in behaviour of carbon dioxide CO₂ and methane CH₄ as super-conductive nano materials are shown in Fig: 16.

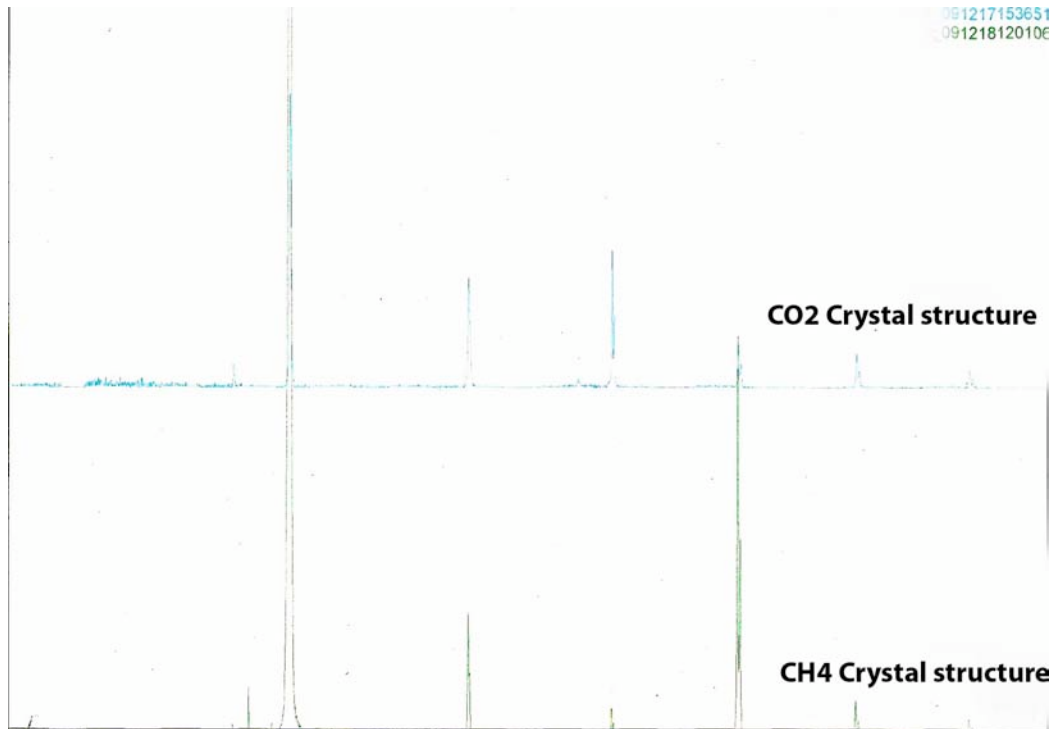


Fig: 16 The XRD superconductivity characteristic comparison of nano CO₂ and nano CH₄.

The common behaviour between the CH₄ and CO₂ nano matters have been observed and shown by superimposing their infrared spectroscopy graphs as shown in Fig: 17.

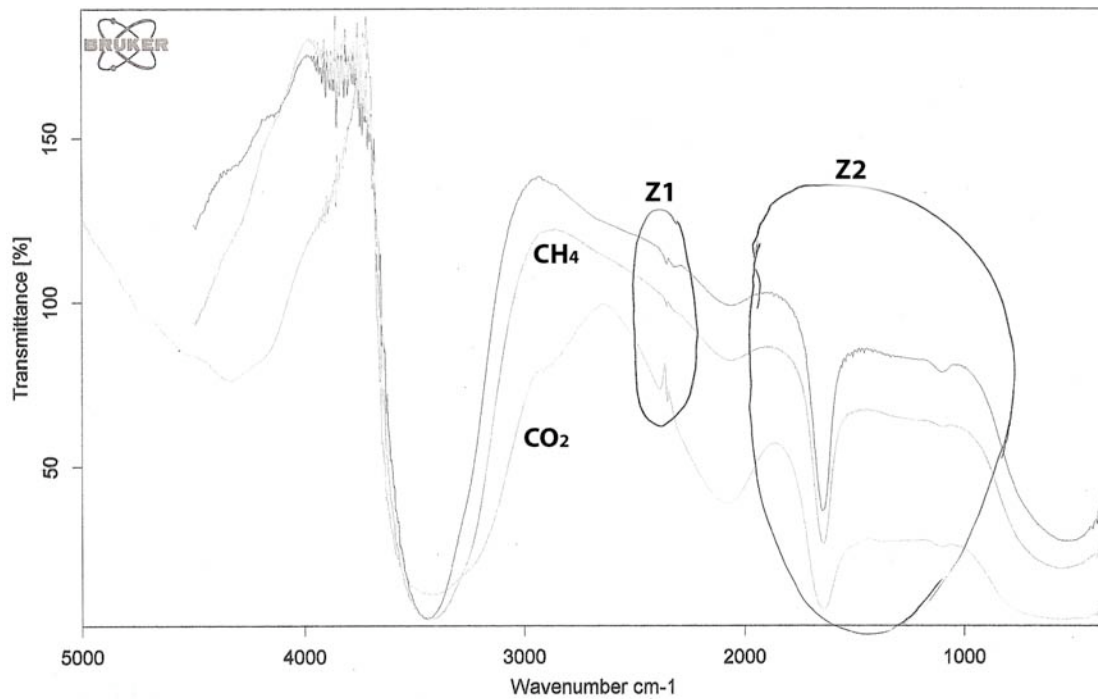


Fig: 17 The IR spectroscopy comparison between nano CO₂ and nano CH₄ in solution

In this graph the CO₂ in zone 1, shows extraction of CO₂ gas from its environment and then forms formic acid as seen in zone Z2. Similarly methane (Me) releases increase the availability of CO₂ in the environment of the chamber of the spectrum machine as seen in zone Z1, and then the same releases' of formic acid as the same as CO₂ as can be seen in the zone Z2 through this process.

This explaining two factors, one that the solution is processing both CO₂ and CH₄ extraction simultaneously and or it is has the ability to produce CH₄ through CO₂ absorption and the water chain interaction as was discussed before.

Enlarged section of the zone Z1 in Fig: 17 are shown in Fig: 18.

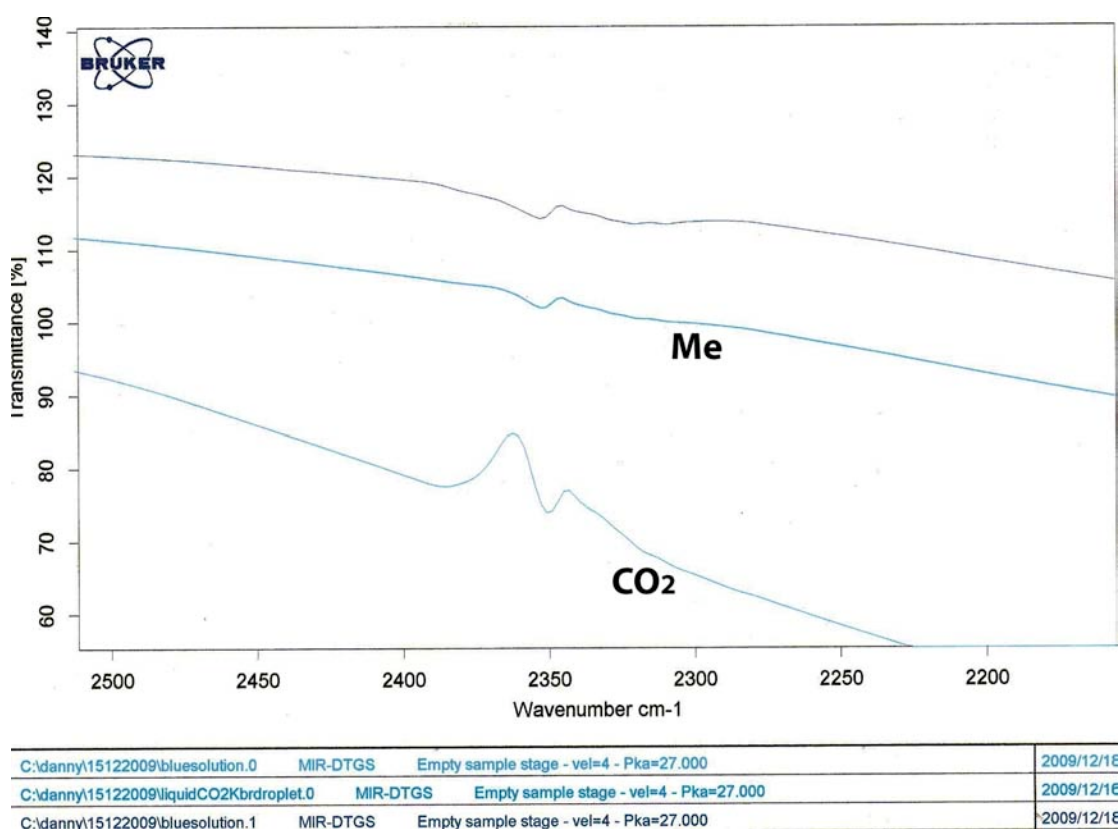


Fig: 18 the enlarged section of the CO₂ and CH₄ in infrared from Fig: 17.

Superimposed graphs of these nano materials of the same region in graph 17 are shown in Fig: 19.

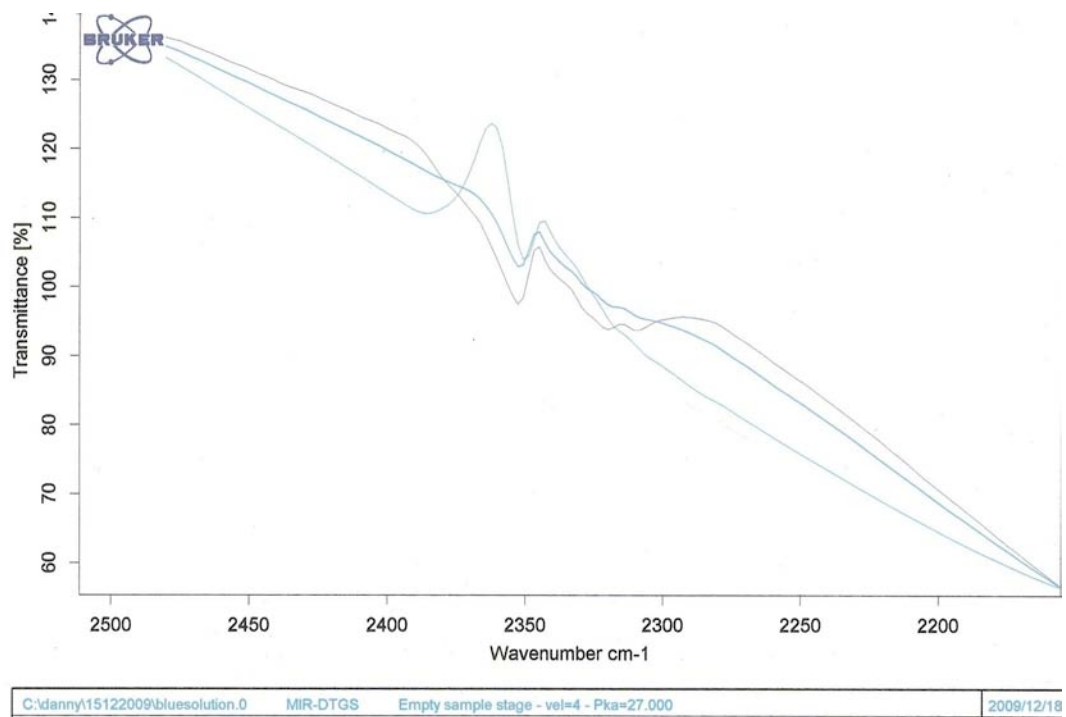


Fig: 19 The superimposed and enlarged section of carbon sector of the Fig: 17.

Observations and notes;

In the development discussed above, one has shown how by absorbing CO₂ from the environment, this being on earth or as the content of craft, this gas can be used to generate energy and oxygen to sustain life without the need for additions reserves of these gases using the man himself as the supplier of the main ingredient matter, the CO₂.

What this new technology offers for the planet earth is a survival line that in the present environment of the global warming with the CO₂ generated by burning of fossil fuels and production of methane gases produced by extensive cattle farming, through the utilisation of this new technology for the first time these gases can be extracted from the atmosphere and simultaneously be converted to solid matters or solution, this process can be used to lead to, and cause the release of energy, and through the use of specially developed composite materials, this leading to separation and generation of oxygen.

Where some of methane and carbon dioxide in the form of nano materials of the same gases can, all be suspended in the solution or dried as solid and reburied or returned to earth as topsoil.

Where this new technology shows for the first time and make it possible to achieve creation and holding of carbon dioxide or methane gases in solid state at room temperatures and pressures. Through evaporation of water from solutions, solid of carbon dioxide CO₂ and methane CH₄ gases in the form of powder nano materials of these gases are produced.

This new system and technology completes the circle of life for maintenance and existence in the future while it can clean up the mess man has created by the use of fossil fuels on earth in the past centuries.

Where these new systems will behave as trees on earth and for the passengers of space systems of the future, by simple converting CO₂ into oxygen, and where the man himself becomes the supplier of CO₂ for the system to keep the cycle functioning.

Through the development of the technology that has been disclosed in this paper the initial steps to conclude this process for application in our space technology is considered to be completed.

In the space technology of the future, one has to be able to use all matters available within a spacecraft to attain a continues and sustainable existence of man in deep space travels.

This technology of direct extraction of CO₂ and CH₄ from the environment can happen in reactors of small and large dimensions. Thus the technology can be used to tackle the Climate Change problem. For example large installations can be connected to exhaust systems of heavy industry, and small extraction devices can be made for households or be built in cars. None of these installations will need powering, as they

will deliver themselves electricity. On the other hand we don't have a sequestering ⁶ problem since the CO₂ and CH₄ are already in a solid state, which make storage easy. However our liquid and solid CO₂ combined with limonene oxide can also be used to make new type of polymers and plastics.⁷

We have developed and attained a fully integrated system that is able to sustainable life in space.

In letting the process of CO₂ absorption and production of energy to continue, some cells of the system start the process of production of methyl CH₃. This is a significant process as this shows organic process as CO₂ is in progress within the system.

Further, this process in conjunction with its water content, and nitrogen from the environment, can itself lead to production of natural sugars, starch and proteins, using our simple static gravitational system.

This simple system can be used not only to clean up the environment from CO₂, but at the same time the same CO₂ can be used in conjunction with specific matters of the system, to release energy, oxygen. Further at the same time producing CH₃ and methane and formic acid and by use of nitrogen this leading to production of protein(s) that can be the food supply for the humans' passengers of spacecrafts of the future while they inhale oxygen and exhale CO₂.

Thus through this new technology mans' existence on board of the spacecrafts of the future, the man becomes the container and supplier of carbon dioxide and hence the provider of oxygen for his own existence.

Thus, man himself becomes the conversion system to maintain his own survival in deep space or on earth during shortages of food or natural disasters.

The property of this system has allowed us to submit a full patent for the first full day and night energy panels.

⁶ http://en.wikipedia.org/wiki/Carbon_sequestration

⁷ <http://www.chem.cornell.edu/gc39/>

New state of matter

When considering this new technology and understanding the potential of its physical ability to convert gases into solid state of the same, where up to present knowledge the gas from being able to take the shape of its container, for the same atom or molecule becoming the container of itself as a nano matter, then this new state of matter or the solid state of the gas at ambient conditions like the room temperature and pressure, itself becomes the nano matter of the gas and this state of matter has never been known in the world of science and has to be considered to be a new state of Matter or the sixth state of matter.

Where through our development of matters in our technology we consider solid, liquid, gas, plasma, and dark matter as the first five known states of matters up to this point in our technological development.

This being due to the fact that this new nano matter of the gas in solid state, it does not behave and looks as any of its old states of matters or any other state of matter as we have known and what we have seen before from these matters.

The infrared and XRD testing of these carbon dioxide CO_2 and Methane CH_4 gases in nano state showing that this matters behaves like a superconductor material, where nor hydrogen or hydrogen and the carbon in there matters are considered as super-conductive materials in the present world of science known knowledge in their gas stat of their molecules.

To our present knowledge superconductors at this levels are by principle of matter in diamond structure or sp^3 state of matter. Where, their physical gas equivalent of these matters known to science and are classed as odours.

Thus as in this new state of matter molecule of **GAs** which becomes **Nano** of itself and become and appears as **Solid** state of matter as we have seen from our testes and shown as solid of the matter in this paper, this new state of matter needs a new name, for it to show the source of the matter, that is from GAs to Nano of Solid and to be called **GANS** for short.

This new name in fact clearly not only indicating the source of the matter, which is the gas, but at the same time it clearly explains what to be expected and describes the characteristic of these matters too.

Where these new characteristics being like superconductivity, lightness, singularity of grains and so on, of the same molecule as it become nano of itself and become solid of itself but having full molecular structure of a gas, but self gravitationally and magnetically closed and singular, but it still can be in a gas state of itself, but as it becomes singular atom or molecule of itself it behaves as solid matters do.

Thus from this point on, we do not call these solids of nano of gas or nano CO_2 , but GANS of CO_2 .

First ever pictures of these matters in Gans or solid state are shown in Fig: 10(s) for

CO₂ solution and dry state.

Pictures in Fig: 11 and 12 shows the first ever solutions of methane and dry or gans of CH₄ respectively.

Through experiments and deliberate mixing of different gans in one solution, it is clear that these materials do not mix or do not chemical interact with each other. Where each gans of each matter stays separated from the other matters within the solution, and stays the original gans. Fig. 20 shows a mixture of three gans in a solution, where they stay without any chemical binding, where for example the green residue settles can be seen at buttom of the tube.

Similarly for the first time in the world of science, through understanding of this technology, we can capture odours as solid? But the question is that, would they smell the same as their sp³ counterpart as gases? This is the question to be answered and explored in the times to come.

Parallel with development and extraction of gans, these systems produce energy, which are not due to burning of fuel or chemical conversion like in a battery. The energy produced during the process of gans from any system, which this energy can be used for any purpose, this being creation of gravitational field force to create static sources for creation of Magravs, power to run a motor or light-up a lamp, this new source of energy needs a clear and new name classification.

We call this new method of production of clean energy, this being in magnetic field force strength or electric energy, the GAs Nano Solid Energy or **GANSE** for short or Gas Energy Soild for short GES.

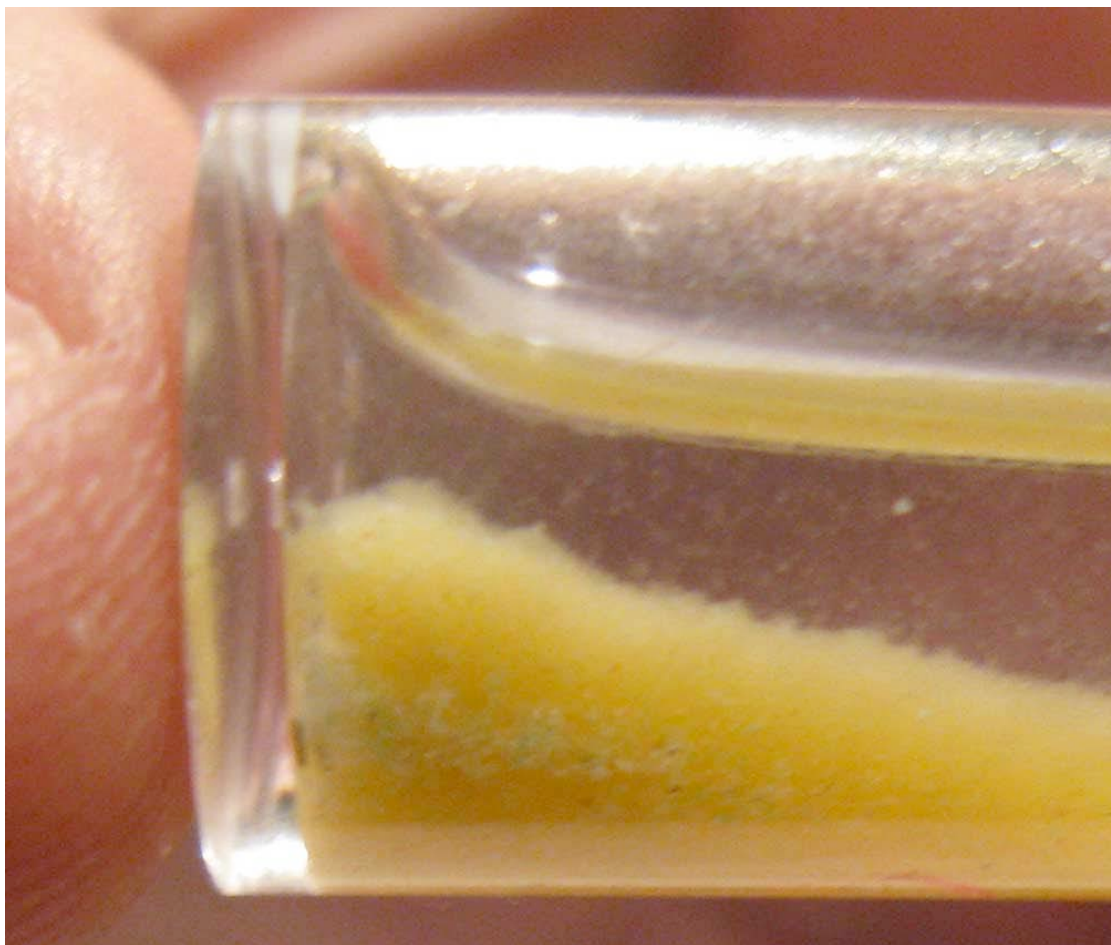
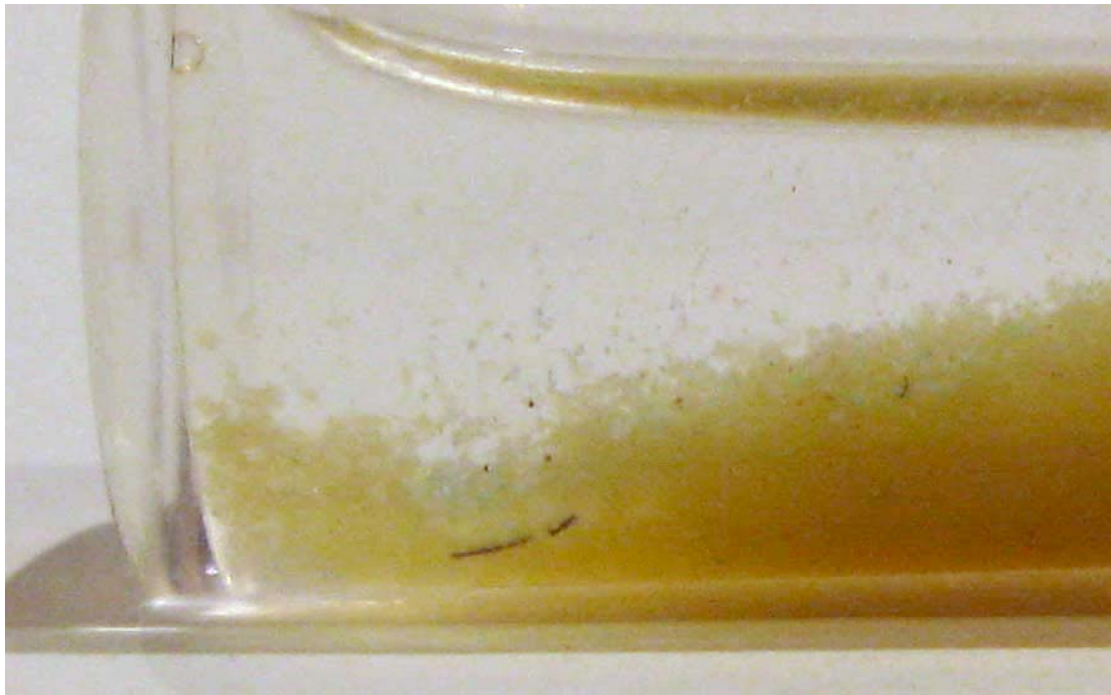


Fig: 20 Different Gans do not mix or chemically bind, and stay separate in the solution.

Implication and applications of this new technology

In the development of the technology discussed above, we have shown how by absorbing CO₂ from the environment, this being on earth or as the content of craft, this gas can be used to generate energy and oxygen to sustain life without the need for additions reserves of these gases using the man himself as the supplier of the main ingredient matter, the CO₂.

What this new technology offers for the planet earth is a survival line that in the present environment of the global warming, with the CO₂ generated by burning of fossil fuels and production of methane gases produced by extensive cattle farming, through the utilisation of this new technology for the first time these gases can be extracted from the atmosphere and simultaneously be converted to solid matters or solution and return of this matter as solid into the ground,

The development of this new technology shows and make it possible, for the first time in world of science to achieve absorption and containment of carbon dioxide or methane gases in solid state at room temperatures and pressures.

Through evaporation of water from solutions, solid of carbon dioxide CO₂ and methane CH₄ gases in the form of powders nano materials of these gases can be produced, where in later stages in different applications like manufacturing processes, these materials can be added to effect the physical or the property of different matters or produce new types of matters with these new materials.

These new matters of gans can be used for example as new biological nano filters, where their purity or the molecular size of gans can determine the matters to be filters, this being cancer cells, germs or other matters.

Through the use of this new technology the circle of life for maintaining a clean environment in the future, while it can clean up the mess man has created by the use of fossil fuels on earth in the past centuries.

Where these new systems will behave as trees on earth and for the passengers of space systems of the future, these systems by simple converting CO₂ into oxygen, guaranteeing ever supply of life essential need, where the man himself becomes the supplier of CO₂ for the system to keep the cycle functioning and guaranty his own survival.

In our tests, in letting the process of CO₂ absorption and production of energy to continue, some cells of the system start the process of production of methyl. This is a significant process as this shows organic process in progress within the system.

Further, this process in conjunction with its water content, and nitrogen from the environment, can itself be used to lead to production of natural sugars, starch and proteins, using our simple static gravitational system.

This simple system can be used not only to clean up the environment from CO₂, but at the same time the same CO₂ can be used in conjunction with specific matters of the system, to release energy and oxygen. Further at the same time producing CH₃ and

methane and formic acid and by use of nitrogen this leading to production of protein(s), that can be the food supply for the humans' passengers of spacecrafts of the future while they inhale oxygen and exhale CO₂.

Through the development of this technology that has been disclosed in this paper, the final steps to conclude the process for application of these systems in our space technology is considered to be completed. Where in the space technology of the future, one has to be able to use all matters available within a spacecraft to attain a continues and sustainable existence of man in deep space travels.

This technology of direct extraction of CO₂ and CH₄ from the environment and producing energy can happen in size reactor. Thus the technology can be used to tackle the Climate Change problem, for example by the use of large installations that can be connected to exhaust systems of heavy industry, or small extraction devices that can be made for households or be built in cars.

Where these CO₂ extraction system, by their nature of operation as described above, they can become the natural backup energy systems and vacuum systems for space crafts of the future.

With the completion of this sector of our technology, we have developed and attained a fully integrated system that is able to sustainable life in space. Where we have shown through other sectors of technology, systems for motion with gravitational positioning through our nano materials we have shown how to produce matters in the universe and materials to manufacture for what man needs for food and habitation, then we have shown how to develop the system to feed and produces systems to cure ailments through our medical application section, and in the energy production system we have shown how to generate energy through simple natural process, and finally now with this technology we have shown how to create a self sufficient environment to sustain life with extraction of CO₂ and use of the same to create oxygen for man to survive in space.

Thus through this new technology mans' existence on board of the spacecrafts of the future, where the man himself becomes the container and supplier of carbon dioxide and hence the provider of oxygen for his own existence is complete.

Thus, man himself becomes the conversion system to maintain his own survival in deep space or on earth during shortages of food or natural disasters.

The property of this system has allowed us to submit a full patent for the first full day and night energy panels and all other points which has raised as new science in this paper.

Conclusion

Through new and simple methods which has been developed and explained and production of new materials with some new properties which has been confirmed, we have managed to create and establish clearly how gases can be made to be contained, extract and converted into solid state of matter, without the use of any chemical reaction, temperature or pressure, and simply through creation of condition of mini and localised Magnetic and gravitational fields within the system, as is done in the universe.

Where, these fields are hidden within the static layers of different matters within the system, as they have been chosen as the electrodes within the structure of these systems.

Where clearly in picture Fig: 10, one can see that these matters are normal solid and can be handled like any other solid matter.

Clearly from the infrared spectroscopy and XRD graphs of these matters and solution it is clear that the matter absorbed or extracted from the environment, as gases are so pure and in nano state that their spectroscopy recorded data is as close as to perfect theoretical for CO₂ gas. This purity of the matter, showing itself in such clear and single perfect lines of graphs shown from the test of the actual sample of the solutions of these gases.

At the same time, it is confirmed that nano gases do behave as their metallic and semi metallic matters in the universe and they become or attain the behaviour of conductors and superconductors and super resistors. Where this finding of the behaviour of these gases solves and answers a number of unanswered questions in the world of physics, chemistry and biological binding, movement and motion of planets, stars and matters in cosmos.

This paper in its simplicity of its presentation and the knowledge it has put forward, it will in due course bring about fundamental new ways that a number of problems in the scientific world concerning gases and solids are to be considered.

For example we can think of ways to solve the mystery of the abiogenesis (the study of how life on Earth could have arisen from inanimate matter.) or how proteins could have been created in Space by local super-conductive conditions.

With the knowledge gained with the operation of these simple power cells, new systems in production of vacuum, creation of matter, extraction of matters and conversion of matters can be developed, and in a way this paper opens a new an unbelievable horizon to the man for science and space technology of tomorrow.

We have shown and clearly proven not only one does not need all sorts of machines to create or extract matters from the environment but simply following the laws of universal gravitational and magnetic field forces, one can achieve the same in a much simpler way, and instead of using energy to achieve production of a matter, one can extract energy from the same system and achieve better results in doing the same process.

Additional pictures

Some pictures of different matter which have been gravitated to the system are shown in the picture below.

Up to this point we have managed to attain six different elements in gans-state, which each one has it's own colour as can be seen in sample tubes as they have been extracted from the system during it operation, while producing energy. Some of the materials shown have not be subjected to IR and XRD spectroscopy to confirm the composition of the original gas before they were converted to their gans-state.

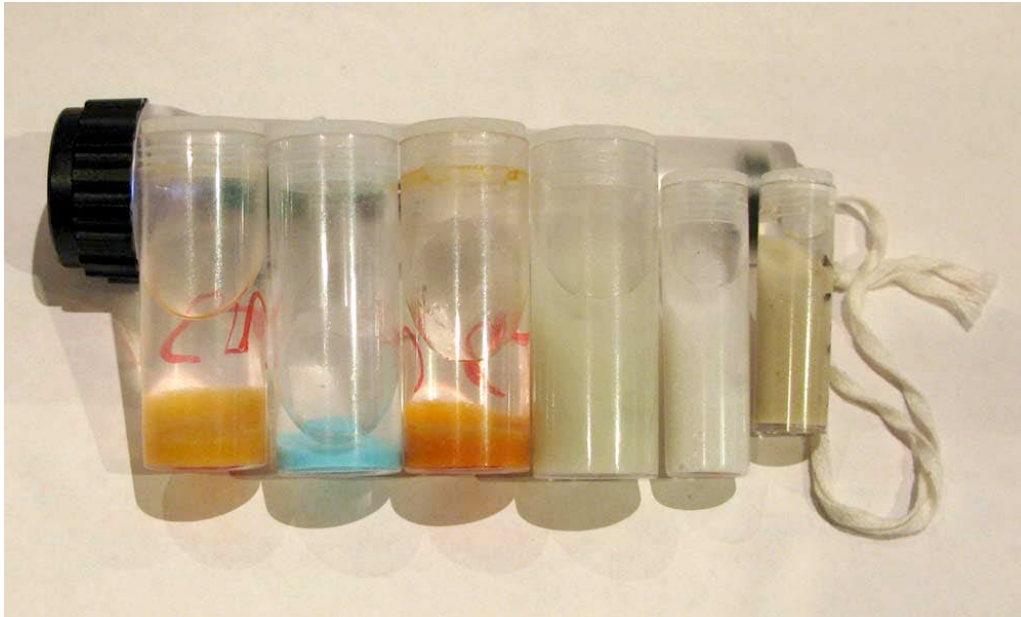


Fig: 21. Six different materials in gans-state which have been gravitated by the system up to today (05.01.2010).



Fig: 22. Two different materials in gans-state which have been gravitated by the system. Which we think these are organic gases in Gans-state. They have different orange colours.



Fig: 23. CO₂ in gaseous-state which have been gravitated by the system. It contains solid flakes within the solution.

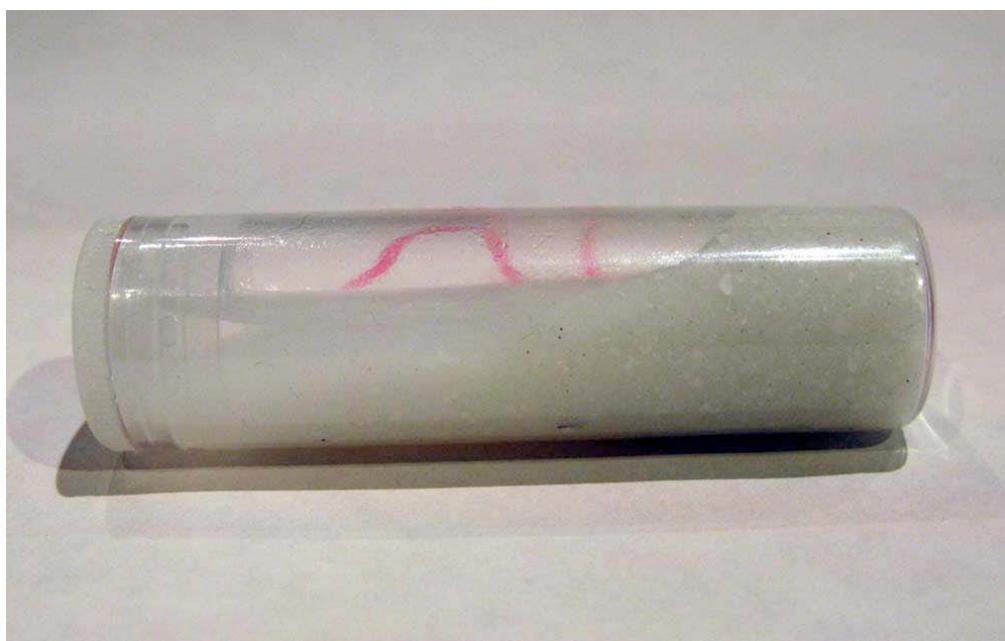


Fig: 24. Different angle of the same solution as figure 23. CO₂ in gaseous-state which have been gravitated by the system. It contains solid flakes within the solution.

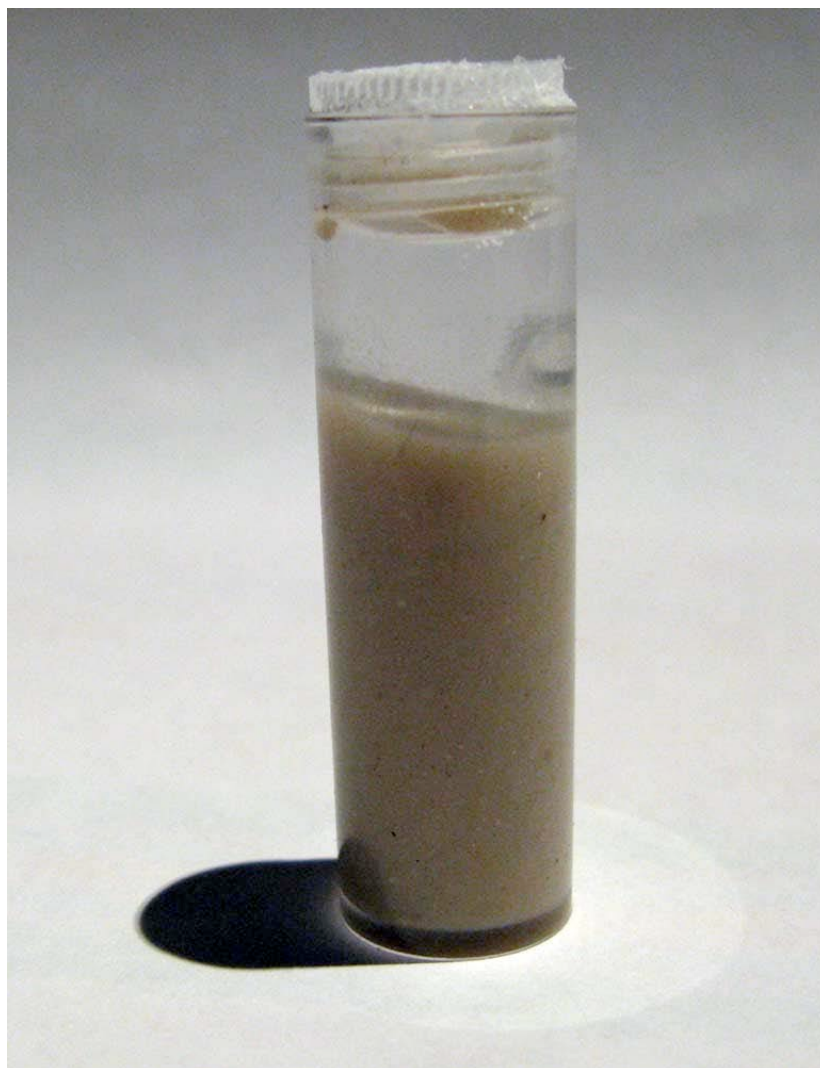


Fig: 25. Unknown composite material in gaseous-state which have been gravitated by the system.

Tags: Direct capturing, extraction, CO_2 , CH_4 , CH_3 , absorption, solid CO_2 , solid CH_4 , Formic acid, nano-materials, GANS-state,